



U.S. Department  
of Transportation

**Federal Railroad  
Administration**

## **Railroad Safety Advisory Committee Task Statement: Locomotive Cab Working Conditions**

**Task No.:** 97-2

**Date presented to the RSAC:** June 24, 1997

**Purpose:**

To safeguard the health of locomotive crews and to promote the safe operation of trains.

**Description:**

Evaluate the extent to which environmental, sanitary, and other working conditions in locomotive cabs—as detailed below—affect the crew's health and the safe operation of locomotives. For issues involving ergonomics, investigate the possibility and/or feasibility of effective improvements in the design, location, and construction of locomotive control compartments to achieve an optimum environment under normal operating conditions, and to enhance the safety of cab occupants in the event of collisions or derailments.

**Issues requiring specific report:**

- (1) **Noise:** Revise existing cab noise limits to take into account current requirements of the OSHA standard, specifically as it relates to hearing conservation provisions. Further, continue efforts to evaluate engineering controls and other measures used to minimize noise exposure in locomotive cabs.

Target date to report to RSAC: 1/99

- (2) **Sanitary Facilities:** Research comparable workplace requirements in an effort to develop minimum acceptable regulations, guidelines, or standards as appropriate for locomotive cab environment.

Target date to report to RSAC: *to be determined by full committee*

- (3) **Vibration:** FRA, in conjunction with all segments of the rail industry, is requested to pursue a research program to encompass the following:
- ÷! conduct vibration measurements
  - ÷! survey available literature on vibration to assess its possible effects on the operating crew in the locomotive cab environment
  - ÷! develop applicable vibration guidelines for future cab design as appropriate

Target date to report to RSAC: 7/98

- (4) **Temperature:** Revise FRA rule on minimum cab temperature, while addressing development of an upper temperature limit.

Target date to report to RSAC: 7/98

- (5) **Ergonomics:** Review relevant accident history, prior efforts in similar forums (specifically, the Locomotive Control Compartment Committee), and available research to address the extent to which implementation of standardized controls and displays, improved seat design, and other areas broadly addressed under the subject area of “cab ergonomics” may improve safety through reducing the likelihood of operator error, improving response time, and other safety-related benefits.

Target date to report to RSAC: 7/98

**Source:**

Section 10 of the Rail Safety Enforcement and Review Act of 1992.

**Refer to/establish following working group:**

Locomotive Cab Conditions Working Group

**Target dates:**

As described above, (*to be determined*) for sanitary facility issues, July 1998 for temperature, ergonomics, and vibration issues, and January 1999 for noise issues.

**Disposition:** Accepted Declined

**Date:** \_\_\_\_\_